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STRIKES & THEIR CHANGING ECONOMIC CONTEXT

Let us pray that the industrial workers of Britain may cease to bring hardship and loss upon their fellow countrymen by strikes, absenteeism and idleness. (From form of prayer proposed by Bishop of Rochester in February, 1947, quoted in *Reynolds News*, 9/2/47.)

Aided by a favourable record of industrial peace, a high level of industrial activity had been achieved. (Economic Survey for 1947, Cmd. 7046, p. 15.)

Strikes are a form of rest and consequently beneficial to production. (Opinion of Ministry of Labour official, quoted in *People in Production*, 1942, p. 247.)

1. INTRODUCTORY

It is generally assumed that the economic effects of industrial disputes have some significance. Any general assessment of this is complicated, however, (*a*) because of the absence or unreliability of quantitative data for measuring the scale of disputes—' in fact, the circumstances of strikes cannot be made the subject of exact statistics '[1], (*b*) because the economic effects of disputes will depend not only on their scale but also on their general economic context, of which there is even less an adequate measure, and (*c*) because of bias in presentation : ' labour statistics generally are liable to be utilised and interpreted according to the various interests of the parties concerned ', and this ' holds good particularly of the statistics of industrial disputes which imply acute conflicts of interest between employers and workers '.[2] The fact that almost all disputes take the form of strikes[3] (*i.e.* appear, irrespective of their origins, as wilfully aggressive acts of the workers), the fact that some strikes cause more inconvenience or loss of prestige—personal or political—than economic damage, the fact that some strikes reveal intentions and aspirations that go beyond a mere ' dickering over the price of potatoes '[4]—

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[1] *Bowley, Elementary Manual of Statistics* (1934 edn.), p. 187.

[2] *Methods of Compiling Statistics of Industrial Disputes*, ILO 1926, p. 6.

[3] The notoriously awkward distinction between strikes and lockouts is not made in British labour statistics. If, however, those ' Principal Disputes ' (listed monthly in the Ministry of Labour Gazette), which involved 1000 workers or more are considered, then between January 1911, and June 1945, only about 2 per cent of all disputes, involving less than 6 per cent of all the workers concerned, took the form of lock-outs. The relative obsolescence of the lockout as a counter to the strike is understandable in the light of the development of more institutional and less dramatic forms of strike-restraint. In the remainder of the present article the term ' strike ' is used synonymously with ' dispute '

[4] G. Soule, *The Strength of Nations*, 1942, p. 187.

such considerations are still apt to colour people's judgments of their economic effects.

In the past, while strike fluctuations[1] have shown some degree of correspondence with other cyclical economic movements (*e.g.* of employment, production, exports, and so on), they have normally been more of a barometric symptom than a significant contributory cause of those movements; and even in those isolated and exceptional years where strikes have had a marked reciprocal influence because of their effect on production, this has been quickly offset. (The influence of strikes on wages is discussed later.) Professor Pigou has pointed out that in so far as strikes seriously affect existing stocks, ' there can be little doubt that industrial disputes—or rather excesses and deficiencies in industrial disputes as against the average—are a genuine cause of industrial fluctuations '[2]; but that the fluctuations are generally short-lived, and in practice ' on the whole body of evidence . . . it seems reasonable to conclude that, in recent times at all events, industrial disputes have not played any significant part in causing industrial fluctuations.'[2]

Although a considerable number of relatively small strikes usually mark the upswing of the trade cycle for obvious reasons, it would be difficult to show that the upswing had been materially slowed down by strikes; and though bigger and more stubborn ' defensive ' strikes have usually developed during the downswing, their effect is unlikely to have deepened slumps appreciably—particularly since the persistence of heavy unemployment has acted as a notable deterrent from striking.

Many studies have been made, particularly in the U.S.A. (*e.g.* by Hansen, Yoder, Griffin, Peterson and others) of this largely one-way relation between strike fluctuations and general cyclical movements. As might be expected, however, the relation is less marked in British than in American experience —at least since, say, 1914. In the U.S.A. general economic fluctuations, including strike fluctuations, have been more spontaneous than in the U.K., where such factors as (1) a more complete involvement in both wars, (2) the exceptional character and consequences of the 1926 general strike, (3) a fuller development of joint industrial machinery and general labour legislation and (4) an increasingly deprecatory attitude—now strongly reinforced by the presence in power of a Labour Government—on the part of the Trade Unions to strikes, have all tended to impose new patterns on the strike movement and to insulate it to that extent from determination by the trade cycle.

Any reciprocal effect which strikes may have had, even in the short term, has been more or less negligible over the last twenty years. Since 1926 there have been no nation-wide strikes in coal or mechanical transport, fewer big strikes generally (the vast majority of strikes having affected single firms only[1]), and fewer long strikes. Again, though any generalisation about the published ' results ' of strikes needs very careful qualification, it seems that, since a steadily growing proportion of strikes have been ' settled in favour of employers ' outright, and the proportion even of compromise solutions has declined, the effect of strikes in disturbing the economic status quo—or cursus quo—may have been diminishing even more in consequence.[2] And finally, if the effect of strikes on wages is considered, not only is the year-to-year effect of strikes on wages smaller than seems to be generally assumed, but wage strikes have formed a progressively less important proportion of all strikes.

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[1] Particularly, in British experience, those of the *number* of strikes, which is perhaps the most sensitive of measurable strike phenomena in this regard.

[2] Pigou, *Industrial Fluctuations*, 1929, pp. 51–52. The period considered is from 1894 to 1913, which includes the big pre-war strike movement. The influence of the exceptionally big post-war strikes from 1919 to 1926 is discussed by Clay, *The Post-War Unemployment Problem*, 1929, pp. 37–38 ; he considers that the ' true trend of employment ' is apparent by 1928, *i.e.* before the peak of the boom.

Yet while no one would pretend that past strikes have contributed very materially to present economic difficulties, future strikes are another matter : ' I cannot imagine ', said a recent speaker,[3] ' a worse time in the history of the country for strike action, or a policy in which we are more certain to forfeit any public support we have for our claim than at this moment.' In the unprecedented situation left by the war, the exhaustion of key stocks and the worsened terms of trade mean the persistence of shortages and therefore of near-inflationary conditions which are so unstable that any loss to production, however small, and any additional pressure coming from uncontrolled wage-increases will be feared to have disproportionate consequences. It is true enough that there has never been a lack of economic arguments—to say nothing of stronger forms of pressure—designed to convince the worker in his own interest of the inopportuneness of strikes of all kinds and at all times; but these arguments have never been so compelling as they are to-day, not only on their own merits but because they are buttressed by appeals to a very strong political loyalty as well as to a more obvious economic self-interest. It is therefore topical to consider available indications of the effect of strikes on production and wage-levels in the past and now.

2. The Effect of Strikes on Production

Sheep farmers have a saying that ' every baa misses a bite '. A similarly rough-and-ready assumption is implied in the common assessment of output lost on the basis of a count of working days lost—which is not unlike estimating air-raid damage by reference to the bomb-tonnage dropped, irrespective of target or type of bomb. Obviously the figure of working days lost cannot but be inaccurate, incomplete and ambiguous, and cannot give anything but a very general indication of even the immediate effect of strikes on output.

It is inaccurate because, if only owing to the difficulties of sheer enumeration in such cases, it is strictly speaking ' not possible to estimate accurately even the simplest and most objective elements of strike costs—namely, the man-days or wages lost.'[1] It is incomplete because no account can be taken of the (hitherto short-term, but occasionally severe) ' multiplier ' effects of big strikes on employment in other industries or even factories[2] ; nor, on the other hand, can appropriate deductions be made for working days which would have been lost in any case from such causes as sickness, absenteeism and so on—still less for the important offsetting and self-compensating effects by which the immediate losses caused by even the biggest strikes have been made up. It is ambiguous if only because, for instance, a figure of 600 working days lost might refer to a strike of 600 men for one day, a strike of 100 men for six days, six one-day strikes of 100 men apiece, and so on ; and the effects of these are unlikely to be identical even if they happen in the same factory, while if they happen in different factories or in different branches of industry, or are subject to an infinitude of other circumstantial differences, the loss of output resulting from the 600 working days lost will differ considerably. It is obvious that quite small strikes in, say, telephones, in the processing or delivery of perishable goods, or, to take a recent instance, among pithead winders and enginemen, may inflict an immediate loss upon output disproportionate to the loss of working days; and it is even more obvious that the immediate ' multiplier ' effects of a coal strike of any size now may be greater than say in 1939, when work could not be found for a ' labour reserve ' comprising some 13 per cent of the workers in the industry.

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[1] Information has been given, though not very consistently, in the Ministry of Labour Gazette since 1933 about the number of firms whose workers are affected by ' Principal Disputes '. Of those ' Principal Disputes ' involving 1000 workers or more, in respect of which such information was given, over 90 per cent involved the workers of one firm only (1933–1939). Considering that these strikes include many of the biggest and none of the smallest, it may be assumed that the general proportion is even higher.

[2] See appendix 2.

[3] Mr. J. E. Herbecq, who was opposing (unsuccessfully) a resolution passed at the C.S.C.A. Conference in favour of the adoption of a strike policy. Oxford Mail, 21/5/47.

Over a relatively wide margin, however, time lost may have no connection with output lost, whatever the economic context may be. ' It cannot be expected', ran the findings of the 40-Hour Week Committee set up by the T.U.C. in 1944[3], ' that the T.U.C. should abandon the pursuit of the 40-hour week because of the fact that the immediate industrial and economic situation of the country calls for increased and sustained production. We do not admit that an early reduction in working hours should necessarily lead to any loss of output. Indeed, we anticipate a quite contrary effect in most industries and services.' Even their severest critics would hardly accuse the originators of the miners' 5-day week (which involves a yearly ' loss ' of at least 15,000,000 working days) of intending to cause an annual loss of coal far in excess of that due to all strikes throughout the second world war; it would be as reasonable to have complimented the mining strikers on striving to increase production by a timely shortening of working hours.[4]

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[1] Gagliardo, Strikes in a Democracy, *American Economic Review*, 3/41, p. 47.

[2] The Ministry of Labour's figure of ' indirectly involved ', evident as are its limitations, refers to workers thrown out of work by strikes at the establishments affected only. Nor are there adequate figures of short-time working, by far the commonest form of unemployment resulting from strikes.

[3] Quoted in Labour, 4/46, p. 230.

[4] It is true that some striking, especially in war time, is in part a reaction from overstrain and represents a concealed holiday ; in the 1945 dockers' strike, for example, ' many of the 10,000 men who came out on strike probably treated the occasion as an opportunity for a few days' holiday ' (*Economist*, 10/3/45, p. 309). Similarly, some U.S.A. strikers have referred to themselves as ' vacationists ' (*Economics of Fatigue and Unrest*, P. Sargant Florence, 1934, p. 190). (In 1940, 450 workers at de Havillands ' took an extended holiday ' (!) to enforce the reinstatement of a convenor of shop stewards who had been transferred : a ' holiday committee ' was formed which approached Mr. Morrison to intervene with the

Nevertheless, the figure of working days lost remains the only direct quantitative evidence available of the effect of strikes; and after due qualifications have been made it ' can well be defended as an interesting index of the economic importance of the dispute '[1], even though it cannot be used with partisan assurance.

(a) ' *Normal* ' *loss of working time through strikes :* (i) *Relative to total working time.*

' Strikes and lock-outs', wrote the Webbs in 1902[2], ' account for much less loss of working time in the year than our laudable custom of treating Good Friday and Christmas Day as Sundays ' ; ' the substitution of a national holiday for an ordinary working day inflicts a larger loss upon output than all industrial disputes of a year taken together ', echoed the I.L.O. later.[3] In the interwar period 1922 to 1936 (but not including the 'abnormal' year 1926, which defied calculation) disputes in the coal industry, where relations have notoriously been most bitter and stubborn, caused a loss of actual production time to the extent of little more than 0.5 per cent.[4] In 1944 it was estimated that strikes in industry as a whole were losing production time to the extent only of 0.2 per cent[5], while the loss due to strikes in the transition year 1945 was estimated by the *Times* at ' considerably less than 0.1 per cent of the total working days '.[6] Though such estimates are of the crudest because precision is impossible, it seems clear enough that the general order of magnitude of the proportionate loss of working time through strikes is normally very small indeed.

If the days lost are considered in relation to the number of workers employed, the picture in recent years has been as follows :

Average yearly loss in working days per worker employed (*main industries*)[7]

1936	0.23	1940	0.12	1944	0.49
1937	0.46	1941	0.14	1945	0.39
1938	0.17	1942	0.19	1946	0.25
1939	0.17	1943	0.22	1947*	0.24

* January to June only.

Since about 94 per cent of all days lost by strikes over the period have been lost by workers in these ' main industries ', and yet the workers in these industries comprise a minority only of the total working population, it is clear that the so-called ' average loss ', if it is thought of as spread out over all industrial workers, is infinitesimal.

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[1] *Methods of Compiling Statistics of Industrial Disputes*, I.L.O., 1926, p. 40.

[2] Webb, *History of Trade Unionism*, 1902, p. xv.

[3] *Methods of Compiling Statistics of Industrial Disputes*, etc., p. 11. Such a generalisation, made on the basis of British and German statistics, involves the assumption that an hour of work lost through a strike means the same as an hour of work lost through a holiday : but, other considerations apart, the dislocation (measured in terms of time lost/output lost) will be greater in the case of strikes which are relatively unexpected.

[4] *22nd Abstract of Labour Statistics* (Cmd. 5556), p. 39.

[5] *Labour Management*, Vol. xxv, No. 271 (12/43—1/44).

[6] *Times*, 11/7/46.

[7] *I.e.* mining and quarrying ; textiles ; metal, engineering, ship-building, etc., ; transport ; building, decorating, public works contracting, etc. ; clothing. For source of figures of workers in employment see appendix 1.

(ii) *Relative to previous losses of working days in comparable periods.*

The loss of working days through strikes is a fraction of what it was thirty years ago, or even fifteen years ago. The contrast is evident :

Average yearly number of working days lost through strikes :

Pre-War Years		*War Years*		*Post-War Years*	
1911–14	17,680,000	1915–18	4,230,000	1919–20	30,770,000
1936–39	1,980,000	1940–45*	1,850,000	1945†–47*	2,657,000

* January to June. † July to December. (So also in future tables).

Although such averages conceal to some extent the losses from abnormally big strikes in the earlier years such as 1912, the exceptional years 1921 and 1926 are excluded, and it should be noted that with only one exception (1944, in which more working days were lost than in either 1915 or 1916), the total of days lost in each separate year of the later period is smaller than for any of the years in the corresponding earlier period.

The total of days lost can be thought of as the product of three elements[1] : number of strikes, average size of strike (*i.e.* workers involved per strike) and average length of strike (*i.e.* working days lost per worker involved).[2] The efforts made by all parties to secure industrial peace have reduced the working days lost by shortening and localising strikes (*i.e.* by cutting down their length and size) although the number of separate strikes has risen disproportionately (the yearly average for the second world war, for example, was well over twice that for the first).

The localising of strikes has meant, in practice, mainly the outlawing of very big or nation-wide strikes; and the shortening of strikes may be summarily illustrated :

Strikes lasting less than a week as a percentage of all strikes :

1911–14	45.1%	1915–1918	52.8%	1919–20	38.4%
1936–39	72.1%	1940–1945*	90.6%	1945†–47*	89.6%

Moreover if strikes are classified broadly by size and length, before 1926[3] the strikes that were allowed to drag on for 10 weeks and more were, on the average, the biggest; but after 1926[4] the biggest strikes, on the average, lasted only between 2 and 4 weeks.

Thus the effects of the interwar depressions, of the chastening of the Trade Unions after 1926, of the development of standing joint machinery for avoiding and settling disputes, of the very different external circumstances, domestic policies, and ideologies of the Left which distinguished the two wars, and finally of the special present position of the Unions, have contributed to reducing the aggregate loss of working time by diminishing not only the incidence of big strikes but the size and length of strikes generally. If, however, the number of separate strikes is in fact ' the fairest indication of the friction points in industry '[1], then the scale of outbreaks has been reduced at the cost of multiplying the points of friction.

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[1] For this way of regarding ' working days lost ', I am indebted to an unpublished paper of Dr. K. Forchheimer.

[2] Strictly speaking, this is not the ' average length of strike ', since some workers (miners in particular) have tended to be involved in strikes more than once in the same year—a point which is discussed later.

[3] 1911–26, omitting 1926 itself and the war years 1915–18, during which the strike pattern was ' abnormal '.

[4] 1927–36.

(iii) *Relative to working time lost through other causes.*

The loss of working time through strikes has also proved insignificant in most years compared with that due to other measurable causes (*e.g.* want of trade and unemployment, sickness and accidents, breakdowns of machinery and transport difficulties, and so on). Illness alone, for example, resulted in a loss of 15.6 per days worker in 1944–45.[2]

The loss of working time through strikes in the 1944 estimate quoted above, presumably relating to war years, was said to amount to about one-fiftieth of the time lost owing to other causes (including sickness but excluding idle time necessitated by changes of programme, delays in deliveries, breakdown of machinery, etc.). Even in the coal industry the loss from strikes from 1927 to 1936 amounted to rather less than one-fiftieth of the time lost owing to other causes (excluding absenteeism but including accidents, holidays, transport difficulties and other causes of which easily the biggest was ' want of trade '). During the inter-war years the loss through strikes in this industry was completely eclipsed by the loss from want of trade, and during the war years by that from absenteeism—a rough calculation indicates that over the pre-war years 1938–39 the loss of coal through strikes amounted to rather less than 3½ per cent of the loss attributed to want of trade, and over the war years to a similar proportion of the loss attributable to absenteeism.[3]

While such figures are the broadest approximations and not to be relied on as indicating anything except the most general orders of magnitude, it seems clear that the cost in working time of other causes of loss—unemployment, sickness and accidents, inefficiency at all levels—has hitherto been very much greater, speaking generally, than the loss due to strikes.[4] Even if the loss from most of these causes could be more or less allowed for on an actuarial basis and the loss from strikes were regarded as an awkward marginal item, its relative magnitude might hardly seem significant enough to warrant the importance often given to it.

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[1] *People in Production*, 1942, pp. 247–248.

[2] October 1944 to September 1945. The figure includes short absences of 1—3 days not revealed by health insurance figures, but excludes absences from injuries and long-term illnesses in institutions. (Ministry of Health Report for year ending 31/3/46, Cmd. 7119, p. 105).

[3] See *Ministry of Fuel and Power Statistical Digests*, Cmd. 6920 and 6538. The tonnage of coal lost through absenteeism can be roughly estimated—on the conventional basis, *i.e.* without allowing for the fact that the number of ' possible' manshifts varies—by calculating the number of manshifts reckoned as lost from this cause and multiplying this, not by the O.M.S., but by a somewhat larger figure to allow for the dislocation caused. A ' dislocation ratio ' (tonnage lost : manshifts lost) of say 1.3 assumes, necessarily arbitrarily, that the dislocation caused by absenteeism is comparable with, but somewhat less than, that caused by the listed interruptions of production other than holidays. (A general idea of the comparative dislocation caused by various forms of interruption can be got from table 6 in Cmd. 6538).

[4] A comparable order of insignificance is shown however the problem is approached. In 1925, for instance, some eight million working days were lost through strikes (a level never touched after 1929) ; benefit was paid in respect of some 138 million days of sickness ; while unemployment could hardly have accounted for less than 370 million days' loss. Such figures, again, are neither complete nor wholly independent of each other ; but the general ratio between them will stand.

(b) ' *Abnormal* ' *loss of working time through strikes.*

The traditional tendency to exaggerate the importance of the loss from strikes, however, has no doubt been partly due to the fact that the shock effect of a big strike may be (and may be intended to be) severe. In any case, while to be restricted to 51/52nds of one's yearly consumption may not seem very important, especially if the loss is likely to be made good sooner or later, to starve for a week is a different matter. Though it has often enough been maintained by those whom Kalecki has designated as ' workers' friends '[1] that strikes hurt the worker in this respect more than the employer (and it is true enough, however irrelevant it may seem to those on strike, that lost profits are commonly made up quicker than, and sometimes at the expense of, wages) some strikes have affected a very wide range of industries and have jolted the whole economy of the country. Such, for example, were the strikes of 1912, 1921 and 1926 : one has only to reflect that in this latter exceptional year the miners were on strike for some seven months and the loss of working time per employed miner over the entire industry was more than 120 days (quite apart from the loss to other industries from the general strike which accompanied the outbreak of the coal strike), to realise how great was the jolt to the economy. In the political heat of the moment, conflicting, alarming and occasionally ridiculous estimates of the prospective loss were made—in terms of working time, money, employment, output, exports and so on.[2] Little more than a year later, however, the economic effects of the cataclysm had to a great extent worked themselves out—it was the political effects that persisted. However fatal such ' abnormalities ' might prove to-day, they were no more fatal then than they seem to be likely now.

(c) *Compensating factors.*

The immediate effects of a few big strikes on employment and general industrial activity are so obvious that the offsetting and compensating factors, and the speed with which they have generally operated in the past, are commonly ignored. ' The common belief that unreasonably great losses of time and money result from industrial disputes is not well founded. Most of the production lost during a strike is usually made up either before or after the strike, by the persons directly involved or by others.'[1] To-day and in Britain it is no longer possible to build up stocks in anticipation of strikes, though this has been done in the past; but even now measures to combat waste and inefficiency which may be developed during a strike, increased overtime working, a decline in absenteeism[2] and so on which may follow a strike—such factors will defy measurement but should not be wholly ignored.

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[1] Kalecki, *Economic Fluctuations*, 1939, p. 91. Mr. Edwards, M.P., insisted at a Trades Council, Labour Party and Co-operative Party conference at Eastbourne in April of this year that ' it is essential that we abolish the strike weapon, which is more callous than any other weapon because it penalises every one of the workers more than the employer at whom it is aimed '. (*Manchester Guardian*, 21/4/47).

[2] (The more factual and restrained estimates of the extent of short-time working and unemployment, of the drop in production in various industries, of the decline in exports and the effect on the trade balance appeared in the Ministry of Labour Gazette and the Economist.) First estimates of the prospective loss in money terms of the 1926 strikes ranged from £3 m. to £10 m. per day (the total production of goods and services being of the order of no more than £12½ m. per day). By the end of the coal strike, however, overall estimates varied from (Bowley) £166 m. to (Sir Hugh Bell and others) £500—£600 m.—a characteristic middle estimate being made by the Economist of about £350 m. Even the more modest estimates inevitably ignored many offsetting factors.

The question has indeed on occasion been a far wider one than this; since for example in a period of embittered labour relations even a big strike may have been economically preferable as an alternative to a prolonged era of smouldering hostility, ca' canny or even chronic apathy : ' in fact,' wrote the Economist in 1926[3], ' many of our bankers feel that if the threat of a General Strike, which has been hanging over Britain for years, can be dissipated by a few weeks of actual strike, a great benefit will have been bought at a relatively slight price.' For these reasons, dubious as some of the direct quantitative data are, ' any figure on the total cost of strikes would be even more fictitious.'[4] It is obvious that the context of strikes must profoundly modify any conclusions which may be based on calculations of time or output lost.

3. The Context of Strikes

(a) *Industrial.*

The effects of strikes will of course be qualified by their industrial distribution—in British experience, perhaps never more than now. There has been a certain correspondence in the variations of the numbers of strikes in different industries, because cyclical economic influences affect industry fairly generally and also because strikes (particularly successful strikes) are to some extent ' contagious ' in themselves[5] ; but the number of strikes is probably the least significant of the elements which contribute to the loss of working time. One would not expect there to be as marked a correspondence between variations in the size and length of strikes in different industries, and it is clearly of importance to consider industrial differences in respect of men involved and days lost. In the following tables these totals have been divided by the number of workers in employment[1], so that although these figures are imperfect it is possible to get some idea of the importance of strikes relative to the effective size of the industries in which they happen.

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[1] Gagliardo, *loc. cit.* Griffin (*Strikes*, 1939, p. 86) remarks that U.S.A. coal output has been higher than usual in the years of some of the greatest coal strikes—partly no doubt owing to the over-operation of such compensating factors.

[2] Bowley (*Royal Economic Society Memorandum*, No. 96, 10/43) when estimating that ' the 2000 stoppages in collieries during the past four years have resulted in the aggregate loss of only three days' output ', suggests that some of this loss ' may have been balanced by a reduction in absenteeism after settlement of the dispute.'

[3] 15/5/26. Mr. Churchill, speaking in the Commons as Chancellor of the Exchequer, 17/5/26, considered that the General Strike itself (as distinct from an ' unduly prolonged ' coal strike) which caused the loss of some 15,000,000 working days, would be unlikely to cause any ' appreciable disturbance in the outturn of the current financial year ', since the additional revenue which had come from increased customs clearances before the strike began, the savings in normal expenditure which had been effected during the strike itself, and the prospect of increased activity after the strike had ended could be expected to countervail any fall in profits or revenue—while the net direct expenditure in meeting the strike would probably be less than £750,000 (the Supplementary Estimate of 6/7/26 for breaking the strike came to £433,000).

[4] Florence Peterson, *Strikes in the United States*, 1880–1936 (U.S. Bureau of Labor Statistics Bulletin No. 651, 1937), p. 11.

[5] The degree of correspondence between the yearly number of strikes in each industry and in industry as a whole between January 1911 and June 1945 is shown by the following correlation coefficients : mining and quarrying, .7780 ; textiles, .3716 ; metal, engineering, shipbuilding, etc., .9606 ; transport .8050 ; building, decorating, public works contracting, etc., .5640 ; clothing, .5874 ; other industries and services, .6403.

Working days lost per worker in employment (yearly average) :

	Mining and quarrying	*Textiles*	*Metal, etc.*	*Transport*	*Building*	*Clothing*
1911–14	8.16	1.46	0.98	1.55	1.12	0.25
1936–39	1.12	0.12	0.17	0.18	0.08	0.09
1915–18	0.98	0.74	0.60	0.17	0.33	0.19
1940–45*	1.22	0.05	0.17	0.10	0.04	0.03
1919–20	8.93	4.00	3.38	1.87	1.16	0.60
1945†–47*	0.61	0.04	0.27	0.67	0.02	0.16
1911–45*	8.69	1.54	0.83	0.43	0.45	0.14

Strikers as a percentage of workers in employment (yearly average) :

	Mining and Quarrying		*Textiles*	*Metal, etc.*	*Transport*	*Building*	*Clothing*
	(a)	*(b)*[2]					
1911–14	34.4	32.3	7.3	5.3	15.4	2.3	1.6
1936–39	28.4	17.2	1.5	2.9	2.0	1.6	1.2
1915–18	22.5	22.5	7.9	8.8	3.2	3.4	1.7
1940–45* ...	35.7	21.0	1.0	4.0	2.8	1.8	1.1
1919–20	82.8	66.9	23.7	13.7	27.1	5.8	4.0
1945†–47* ...	29.9	18.7	0.8	4.7	8.0	0.6	1.9
1911–45* ...	32.5	27.3	8.9	4.8	5.5	2.3	1.2

The former of these tables shows relative losses of working time through strikes; the latter gives a general picture of the relative liability of workers in different industries to be involved in strikes. A more detailed breakdown here would show, for example, that in textiles it has been the cotton workers rather than the wool workers who have been involved in strikes (proportionately to their numbers), while in transport it was the railwaymen in earlier years and the dockers and road transport workers in more recent years[3] who have been chiefly concerned; and so on.

The growing predominance of mining strikes over the period is a too-familiar commentary on the exceptionally bad technical, competitive and social traditions of the industry. Moreover, labour is probably also less mobile than in other industries. The bitterness of labour relations is underlined by the characteristic ' duplication ' in the figures of workers involved in mining strikes, which arises because miners, far more than workers in other industries, tend to strike more than once in the same year :

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[1] See appendix 1.

[2] Column (*b*) excludes the duplication which is a marked feature of mining strikes and which is discussed below. The figures in this column are therefore net figures.

[3] The development of road transport, to use a somewhat grandiose phrase of Lloyd George's in 1926 (preface to Glasgow, *General Strikes and Road Transport*, 1926, pp. 14–15), ' established a new truth in political philosophy '—*i.e.* provided a means of breaking railway strikes. Road transport workers (including road haulage workers) have since developed their organisation and have carried out considerable strikes, such as the 1937 ' Coronation ' bus strike and the 1947 road haulage strike ; but with the parallel mechanisation of the armed forces such strikes have in turn proved ' breakable ' where they have caused widespread inconvenience.

Coal Mining strikes only :

Year	*Workers striking more than once in year as percentage of all workers involved in coal strikes :*
1912	9.6%
1919	16.6%
1920	21.2%
1936	32.4%
1937	46.2%
1938	33.8%
1939	39.7%
1940	43.6%
1941	48.8%
1942	40.5%
1943	38.8%
1944	38.4%
1945	50.6%
1946	40.0%
1947*	21.3%

Year-by-year figures have been given regularly only since 1934, and—while the duplication may have been ignored in the classifications of some earlier years—this very fact coupled with the marked rise up to 1945 suggests that the phenomenon had really been growing. In so far as any growth in this proportion could not be accounted for by a mere decline in the total number of strikers (which would imply a hard core of ' persistent strikers ', *e.g.* some of those working in bad pits, whose proportion would automatically increase in consequence), it seems to illustrate, particularly over the pre-war years, a fundamental dissatisfaction which after 1926 no longer found outlet in a national strike—national strikes, whatever their other consequences, at least ensuring that the workers' claims would receive nation-wide attention. (Superficially speaking, it does not seem surprising that an industry with the highest yearly proportion of strikers should also have had a high proportion of strikers striking more than once in a year.)

(b) *Regional*

In so far as industries are relatively homogeneous, the regional incidence of strikes will have no special significance in the present connection but will merely reflect the regional concentration of industries. In the case of the mining industry in particular, however, there are wide regional differences both in respect of the character and destination of the product and also in respect of productivity, so that the effect of mining strikes will be qualified by their regional distribution. The very limited evidence seems to show that, in the case of the experience of the two world wars, not only have mining strikes been, absolutely, more severe in the second war than in the first, but that they have also been relatively heavier in those regions where productivity has been higher or rising relatively quickly over the inter-war years (*e.g.* in Yorkshire and Scotland rather than South Wales). To this extent they will have been somewhat more damaging than a mere comparison of working days lost would show, even though the loss never assumed critical proportions.

(c) *Economic*

It is the general economic context of strikes which provides the least measurable and most significant weighting of any figures of time or output lost. The effect of strikes under certain conditions may obviously be disproportionately severe (*a*) because although the output directly lost owing to strikes may be relatively small their multiplier effect may be very big in a context of shortages and low stocks, where the most important of the compensating factors previously mentioned cannot operate, and (*b*) because labour, in so far as it is fully employed, is in a stronger bargaining position and may use this in order to secure a succession of wage increases all over industry which will aggravate inflationary trends. These considerations seem especially cogent in war time, when owing to the need for rapid changes in organisation and technique shortages are constantly appearing, and when critical shortages may mean military collapse—and when labour militancy, quite apart from the fact that its success on wage issues will aggravate inflation, is dreaded as distracting from, or destroying, national unity. However, war conditions are only one case of ' full ' employment; there are others before us to-day.

In Britain the absence of stocks and the persistence of undermanning in vital industries means that any considerable strike will have more serious effects than before. The winter ' fuel crisis '—*i.e.* the aggravation of the existing coal shortage by a hold-up in transport—can be thought of as somewhat analogous in its shock effect to a national coal strike of 1 to 1¼ days, in so far as 895,000 tons of coal[1] were reckoned as lost in a relatively short space of time. But whereas in former years such losses have generally been made good, in present circumstances the loss was virtually a dead loss since it could evidently not be fully made up despite the best efforts of miners and transport workers—and was for this reason passed on to the rest of industry. At present relatively small variations in coal output, even if they seem negligible against total requirements, are disproportionately important to industry because—under the existing system of priority for domestic consumers and public utilities—industry is the residual consumer of coal.

In this case the overall effect was estimated at a dead loss of some 2 per cent of the production of the manufacturing and building industries, and therefore of commodity distribution.[2] Over the ' crisis ' unemployment jumped from 410,000 (average November 1946 to January 1947) to a peak of 2,417,000[3]: an immensely more sudden leap than occurred, for instance, during the 3-week national coal strike of 1921 and the 7-month coal strike of 1926.[1] Although this figure may be considered artificially swollen since industry was already working short time and would in any case have had to do so in increasing measure, so that to this extent the figure represents a change in structure rather than in volume of unemployment, and although the industrial shut-down was ordered, obviously, before stocks were literally down to zero, the fuel ' crisis ' certainly provided an object lesson on the narrow safety-margins of sudden stoppages in bottleneck industries.

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[1] Of which 215,000 tons' loss was ascribed to ' transport difficulties ' proper (*e.g.* the lack of empty wagons), apart from the results of the sealing-off of mines by snow (miners unable to get to work and, more important, coal unable to be cleared). The general shut-down of traffic caused (*a*) delays in deliveries of coal—the effects of which on industry could generally speaking be made up since industry was in any case working short-time, and (*b*) an absolute loss of coal due to the impossibility of further mining until existing supplies had been cleared from the pits. A stubborn nation-wide transport strike would of course theoretically have a similar effect, but the interdiction of the weather was more effective than any transport strike is likely to be.

[2] *London and Cambridge Economic Service* BULLETIN II, Vol. xxv, 12/5/47. The loss of income has been variously estimated.

[3] *Central Statistical Office Monthly Digest* for May 1947, table 25 (including 503,200 workers stood off but not registered, while excluding workers out of work but retained by their firms.)

As regards the possible inflationary effects of strikes, the U.S.A. wage-strikes of 1945–46 may be taken as a case in point. They started in an industry (oil-refining) where the proportion of wages to total costs was low and where wage increases could be granted without being passed on in higher prices, but spread to industries where concessions were less readily afforded—and provided the occasion for a spectacular price rise which totally outpaced wages. Since then the grip on labour has been tightened, perhaps primarily for political reasons, and the recent Draconian labour bill, following similar legislation in a number of States, is intended to ' restore the balance of power in labor dealings to management.'[2] Nevertheless, big strikes in the U.S.A. to-day would be far less damaging[3], even if they were proportionately much bigger, than in Britain, if only because stocks are higher and any loss would be quickly compensated for.

In Britain the position is very different in so far as the inflationary danger is likely to persist. It is, therefore, pertinent to consider the effects of strikes on wage levels.

4. General Influence of Strikes on Wages

It is important to distinguish strike-pressure on wages from other forms of pressure (*e.g.* political pressure in war-time). The lack of data, no less than its character, make generalisations here very precarious, although the immediate effect of strikes on wages—at least on the wages of those concerned in them—has not seemed significant enough to warrant the assumptions sometimes made. There are very limited figures covering the period 1927 to 1936, which was admittedly a period of low militancy because of the aftermath of the general strike and the impact of the great depression—although after 1926 Trade Union strike policy was more like that of to-day than it was before 1926.

[1] In 1921 unemployment jumped from 1,390,000 (average for 3 months preceding strike) to 2,580,000 ; in 1926 from 1,171,000 (average for 3 months preceding strike) to a peak of 1,751,000.

[2] *Time*, 28/4/47.

[3] It has in fact even been maintained that the relative absence of strikes in the U.S.A. ' solves no problem ' in closing the gap between prices and purchasing power, and ' may, as a matter of fact, in long-range terms produce a problem. Because on the basis of rough justice, a strike at least holds out the possibility that wage income can still remain in some even keel with prices. But labor has been chastened well, and the strikes have not occurred, and the gap is growing and may grow larger.' (Leo Cherne, Executive Secretary to the Research Institute of America, in *Commercial and Financial Chronicle*, 6/3/47). But it is seldom that the primitive devices of the old world are called in to redress the balance of the new.

Over the whole period 1927–1936, the workers who came out on strike for wage increases numbered only some 109,000, or about 4.5 per cent of all strikers. About 15,000 of these won their demands outright[1], and another 56,000 won a proportion of them by a compromise solution. Yet the aggregate increase of wages which might be considered as having been directly ' won ' by striking[2] amounted over these ten years only to some £351,000—less than 0.6 per cent of the wage increases that came about by other means.

During this period wage reductions of course heavily out-balanced wage increases. Some 1,106,000 workers (46 per cent of all strikers) resisted wage-cuts by striking, but these cuts represented only 9.6 per cent of the total sum of wage reductions, and little more than 2 per cent of the strikers were wholly successful in resisting them.

It would be ridiculous to conclude, from the apparent insignificance of the workers' achievements during these years, that major wage increases had never been secured as a result of strikes[3], or even that the speed and comprehensiveness of the development of wage-fixing and negotiating machinery owed nothing to past strike action on many issues (in particular for the right to organise). Obviously things would have been very different if Trade Unions did not exist, if they explicitly forswore the strike, and even if the possibility of the strike were less implicit in negotiation; although it may appear that the strikes that actually happened have been rather less responsible for wage changes in the industries concerned than is sometimes assumed.

It may, however, be argued that what happened before say 1940 is largely beside the point, since under present conditions production can be interrupted more thoroughly and with less effort than ever before in British industrial history; that the bargaining power of the workers is thus greater than ever; that therefore the very threat of a strike appears more cogent than the strike itself (or rather, more cogent than the immediate achievements of strikes would seem to warrant). According to such a view, concessions are extorted by threats alone, implicit or explicit, and the strikes which do take place are increasingly marginal in character: marginal in the sense that they are generally speaking those which are judged likely to be relatively harmless economically—in the long term and from the employers' standpoint—even though the short-term inconvenience that they cause may seem to be a useful weapon from the workers' standpoint.

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[1] Obviously strikes have long term effects which cannot have appeared in the statistics of results. A number of strikes may be formally lost but may still result in the speeding up of later negotiations and in strengthening the Trade Union negotiators' hands, even if the eventual concessions seem to have been granted irrespective of any particular strike. The coal mining wage awards of the second war period, for instance, can hardly be dissociated from the unofficial strikes which preceded them, even though many of these strikes took place on non-wage issues and were mostly ' unsuccessful '. Moreover, recent arbitration experience has been judged to confirm this : see, *e.g.*, *Labour Research* for May 1947, p. 81, where the results for the workers in respect of claims submitted (without strike) to the National Arbitration Tribunal are contrasted with those achieved when the claims have been submitted (after a strike has taken place) to a Court of Inquiry or a Committee of Investigation set up under the 1919 Industrial Courts Act or the 1896 Conciliation Act respectively.

[2] *I.e.* that proportion of the gross aggregate increase of wages which was classified as ' preceded by disputes causing stoppages of work '. (*22nd Abstract of Labour Statistics*, Cmd. 5556, p. 92f.).

[3] A writer in the *Economist* of 19/6/26 analyses the (unfavourable) results of certain very big strikes, each of them involving at least 40,000 workers directly and indirectly—which followed the first world war, and asserts confidently that ' the hard facts tabulated above may well be commended to Labour leaders, who, if they will face facts, will frankly tell their rank and file the lessons they reveal, namely that strikes do not pay . . .', etc. This was too ready an assumption, even in the inter-war depression.

Nevertheless since the Unions have (i) ever since the Mond-Turner Conferences tended to assert that industrial conflicts were neither fundamental nor insoluble (' if responsible union representatives are given the fullest opportunities to put their case, it is, I believe, most unlikely that unions and managements will find themselves unable to agree—ultimately—without having to call a stoppage of work '[1]), (ii) agreed in letter and spirit to the continuation of the Conditions of Employment and National Arbitration Orders and (iii) shown a sense of particular responsibility for discipline in the nationalised sector of industry (' the question of strike action in nationalised industries should become almost entirely theoretical '[1]), the majority of such strikes as have taken place over a number of years have had no official organisational backing.[2] Moreover, for a variety of reasons, ' even unofficial ' (strike) ' leaders have been moderate in their demands.'[3] ' It is when looking at . . . the surprisingly small limits within which . . . hundreds of wage rates are encompassed, that one appreciates (1) how patriotic have been the negotiating machinery and the Trade Unions in avoiding a real inflationary spiral; and (2) how much the workers have been willing to trust and acquiesce in the bargains made by, and the advice of, their Unions.'[4] Indeed, when all allowances have been made, it seems at least questionable whether the strike weapon means as much as it did, either in actuality or potentially, if only because the risk of big or long strikes on any issue—particularly that of wages—appears to have been so much reduced.

5. Relative Importance of Immediate Causes of Strikes.

Although not very much reliance can be placed on a classification of strikes by single ' causes or objects '—since strikes often take place on a multiplicity of issues, not all of which necessarily even become apparent—it would appear at first sight that strikes are tending to become increasingly ' frictional ' in character.

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[1] George Woodcock, Assistant General Secretary of the T.U.C., in broadcast, 18/1/47 (version printed in *Labour*, March-April 1947, p. 211–212).

[2] The preponderance of unofficial strikes is not a product of war conditions. While there has been a marked statistical reticence about their number, size and incidence, it was affirmed as long ago as 1936, for example, that some 53% of all strikes were unofficial—the proportion in the engineering industries being alleged to be as high as 90%. This ' movement ' accompanied the unionisation of the aircraft industry in face of pre-war dilution of labour and speeding up of production ; and some of these unofficial strikes, since they not infrequently aided organisation, were equally unofficially supported by local Trade Union branches and, sometimes, Trades Councils. (See *Ministry of Labour Report*, for 1936 ; also *Labour Monthly* for August, 1939, and *Labour Research*, *passim*).

[3] Cole, introduction to Barou, *British Trade Unions*, 1947, p. vi.

[4] George Brown, M.P. (Transport and G.W.U.) in *Picture Post* 21/6/47 (arguing against a general wages policy).

(a) *Wage issues*

Wages are still the most important single ‘ cause ’ of strikes, at least in the sense of avowed and immediate cause. Between January 1911 and June 1945, 58.1 per cent of all strikes were wage strikes, accounting for 62.6 per cent of all workers directly involved in strikes over the period. ‘ Latterly, however, the emphasis on wage questions has tended to give way to other causes. . . . This relative decline in the importance of wage disputes due to stoppages is the more significant if the absolute decline in the total number of strikers is also remembered. In recent years it is clear that wage problems are settled more often than ever before by negotiation.’[1] Furthermore, since the wages of an increasing proportion of workers in the most ‘ strike-prone ’ industries[2] have been tied to the cost-of-living index, some wage increases take place automatically which might formerly have been granted only after a strike. Thus the strike is losing part of its character as a wage-raising instrument : ‘ it is realised inside the Trade Union Movement that the strike . . . is not an instrument by which the wages problem can be solved.’[3] The decline in the importance of wage strikes can be seen from the following :—

Relative importance of wage strikes : strikes on wage issues as percentage of all strikes :

	(1) *All wage questions* :		(2) *Wage increase questions only*[4] :	
	Strikes	Strikers	Strikes	Strikers
1911–14	63.9%	65.3%	44.7%	25.8%
1936–39	47.2%	38.8%	22.6%	21.9%
1915–18	70.3%	57.3%	58.6%	49.3%
1940–45*	54.3%	57.8%	21.1%	18.9%
1919–20	65.4%	75.0%	53.0%	57.5%
1945†–47*	43.6%	40.9%	11.3%	19.4%

Wage strikes having thus declined in relative importance, it is worth considering strikes arising from some of the less fundamental causes—less fundamental not because they are any less important to those concerned but because they involve broad economic principles less directly or less completely. The chief of these[5] can be broadly designated ‘ solidarity ’ issues and ‘ frictional ’ issues.

(b) *Solidarity issues*

Under this heading are included strikes on Trade Union principle and sympathetic strikes (as percentage of all strikes) :

[1] Barou, *British Trade Unions*, 1947, p. 110.

[2] See table in Section 3a. Many industries have adopted cost-of-living sliding scales, which cover some 2.5 million workers in mining, building and civil engineering, electrical contracting, pottery, boot and shoe, and various industries covered by Wages Councils.

[3] Roberts, *Trade Unions in the New Era*, 1947.

[4] It must be remembered that, owing to the complexities of systems of wage-payment in some industries, the classification ‘ other wage questions ’ will tend to include strikes on a number of concealed wage increase questions (*e.g.* strikes concerning the terms or interpretation of certain awards, such as the 1944 strikes arising out of the Porter Award).

[5] The Ministry of Labour's categories ‘ hours of labour ’ and ‘ miscellaneous ’ are ignored here, as being of lesser importance—although strikes concerning hours reached considerable proportions in 1918 and 1919. The general character of the classification by causes is illustrated by examples in the *Report on Strikes and Lock-Outs* for 1913 (Cmd. 7658), p. 173 f.

	(1) *All 'solidarity' issues*:		(2) *Trade Union principle only*:	
	Strikes	Strikers	Strikes	Strikers
1911–14	9.5%	22.0%	8.4%	20.9%
1936–39	11.2%	21.8%	9.6%	9.9%
1915–18	6.7%	10.8%	6.0%	10.0%
1940–45*	3.2%	7.0%	2.3%	2.7%
1919–20	5.8%	2.8%	4.7%	1.2%
1945†–47*	4.0%	12.1%	3.1%	6.6%

Not unnaturally, the number and scale of strikes on these issues fluctuate in a relatively haphazard way. One might expect something of a decline in strikes on Trade Union principle—or at least for the right to organise and for bare recognition: in proportion as the Unions have shown willingness to collaborate with employers, employers' attitudes have been progressively encouraging, and the consequent development of joint machinery of all kinds has given Trade Unionism 'higher status'. It is significant that the limited statistics of strike-results-by-causes (1927–1939) show that the proportion of workers ('directly involved') winning strikes on Trade Union principle was 66.2 per cent—a far higher proportion than for all other issues (16.3 per cent).[1]

(c) *Frictional issues*

As might be expected, it is strikes classified as being concerned with the employment of particular classes or persons'[2] and 'other working arrangements, rules and discipline' which have been growing in proportionate importance. These strikes, regarded as relatively frictional, are given as a percentage of all strikes:

	(1) *All 'frictional' issues*:		(2) *'Other working arrangements', etc.*:	
	Strikes	Strikers	Strikes	Strikers
1911–14	22.7%	10.3%	5.9%	5.0%
1936–39	37.6%	32.3%	12.0%	10.9%
1915–18	20.1%	22.1%	5.0%	3.4%
1940–45*	38.0%	28.4%	24.6%	14.9%
1919–20	21.3%	9.8%	5.9%	2.5%
1945†–47*	47.3%	32.2%	34.2%	17.6%

It might perhaps be thought that an increased proportion of strikes on working arrangements, since these involve basic industrial questions less than do strikes on other issues, should yield increasingly to fuller joint consultation at lower levels, improved welfare schemes, a more astute or enlightened industrial psychology, and so on.

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[1] Although Trade Unionists still find reason to complain of the half-heartedness of their 'recognition' by employers (cf. Woodcock, *op. cit.*, p. 210), and although notable strikes for recognition did take place in 1946 (*e.g.* in the motor and catering industries), the 1942 BEC/TUC draft of the Fair Wages Resolution and the 1946 FBI/TUC 'agreement' on the question of the 'closed shop' are indications of the extent to which their new position has been accepted. Strikes on 'Trade Union principle' are consequently changing their character, and are no longer to the same extent strikes for the right to organise or for recognition but strikes concerned with the closed shop. This partially explains the rise in the proportion of such strikes during the last period.

[2] Including *e.g.* the strikes against dilution during the first world war and preceding the second—as well as many strikes on relatively 'minor' issues such as the reinstatement of individuals.

6. CONCLUSION

' Anything that delays or lessens production', said Mr. Morrison dramatically at Margate, 'is a blow in the face for the organised workers and their cause. To-day any avoidable strike—whether caused by employers or workers—is sabotage, and an unofficial strike is sabotage with violence to the body of the Labour movement itself.' As political judgments these are fair enough : in a hand-to-mouth economy presided over by a Labour Government, the urge to increase production should mean something more than it did in the ' Produce More ' campaign which preceded the 1921 slump. It may none the less be held that in view of the unprecedented strain to which the economy has been subjected, the record numbers of strikes in recent years are not surprising. ' There are, no doubt,' wrote Professor Cole in the introductory essay already quoted, ' unofficial strikes, which cause great perturbation in high quarters and are assiduously written up by reactionaries who would dearly love to attack the whole trade union movement. But the astonishing thing about these unofficial strikes is not their frequency, but their fewness.'[1] There is moreover some force in the familiar suggestion that many of these strikes ' act as a safety valve, and are a lesser evil than the strife which might develop should small grievances be left to smoulder. . . . The loss of output from these unofficial strikes is probably less than that which occurs when a body of workers has become sullen and resentful '[2]—or even impervious to exhortation.

Again, it is easy enough to point out that strikes as we have known them over recent years are a very minor cause of delay or loss of output as compared with the maldistribution of manpower or misallocation of resources which result from insufficiently precise planning, and even as compared with the inefficiencies deplored in Working Party Reports. Yet this does not invalidate the fact that for some time to come *if* a big stoppage were to take place in a vital industry (chief of all, of course, coal), the country's economy could be paralysed more effectively than even the gloomier prophets of 1926 could have anticipated. *If* such a strike were to succeed, workers in other industries might be expected to follow suit : *if* these further strikes succeeded, the inflationary spiral might be set off, while *if* they were to fail there would be a risk of a serious setback in the morale of the workers. It is because the political repercussions for Labour would in any such case be so very severe that any considerable (i.e. official) strike movement, or even strike-pressure, seems very unlikely indeed. But apart from the contingency of big strikes in vital industries, how far are the residual strikes ' avoidable ' ?

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[1] The movement cannot but take warning, however, from occasions when strikes without Union support develop into strikes against the Union's policy or officials (as did the 1945 dockers' movement as well as some other strikes) ; the development of breakaway and splinter Unions, even temporarily, on a scale capable of federation with some existing unaffiliated Unions outside the T.U.C. (the ' Federation of Independent Trade Unions ' was stated by the *Daily Telegraph's* industrial correspondent last year (31/8/46) to comprise 45 Unions with a total membership of 400,000) ; a certain recrudescence of go-slow and work-to-rule movements and such resistance to the closed shop as is not ascribable to the machinations of employers on the one hand or Trotskyists on the other.

[2] Roberts, *op. cit.*, p. 22.

In fact any classification of strikes into ' avoidable ' and—by implication—inevitable strikes should involve an assessment of their more fundamental causes. The fact that the immediate causes of strikes appear increasingly frictional does not prove them to be increasingly ' avoidable ', since it does not show to how great an extent these immediate causes conceal deeper-seated causes—*e.g.* maladjustments inherent in the nature of industry, the fear of economic depression, ' class antagonism ', and so on.

How far, for instance, can the traditional social conflicts arising in industry be adequately explained in other terms ? ' A man may chafe under factory discipline and believe that the root of the trouble lies in the unrepresentative and irresponsible character of management. But in fact it may lie in the actual nature of the job he is doing or of large-scale production as such.'[1] How far are the feelings of personal insignificance (' the lack of status in society of the manual worker '[2]) or of boredom (' the treatment of worker as a machine-tool . . . inducing psychological and physiological fatigue and denying the stimulus of team work '[3]), which are so freely cited as fundamental causes of strikes, avoidable by welfare and 'scientific' management ?

How far, again, have the fears of a return of the inter-war depressions been exorcised ? ' There is no doubt that the fear of economic insecurity . . . is responsible for much of the present labour unrest in the industry,' wrote the Economist of the dockers in 1945; and the attitude of the Glasgow dockers earlier this year, when confronted with the ' redundancy ' of 500 men, and the similar fear of depression which evidently underlay the 1946 trawlermen's strike[4], reflect the persistence of such feelings of insecurity.

How far, above all, have what the Commissioners of 1917 designated as the ' permanent causes ' of industrial unrest (*e.g.* ' the conviction that Capital and Labour are necessarily hostile, a conviction engendered by conflict in industrial matters '[5]) been modified by the experience of the last thirty years; how far, in particular, is the nationalisation programme, general social record and expectation of life of the present government convincing the workers that the main battles of the ' class struggle ' have been won; to what extent do they still feel that they are being asked to ' collaborate to make capitalism prosperous ' ?[6]

In so far as the root causes of strikes lie deeper than mere managerial maladroitness, proposals or changes which fail to touch these fundamentals will have a correspondingly limited effect. Strikes are no more likely than other forms of warfare to be wholly obviated by the mere streamlining of diplomatic procedure, by rigid and partial definitions of aggression, by the threat of sanctions or counter-warfare, or even by appeals to higher loyalties. It is true that these methods have greatly curtailed the scale and persistence of strikes over the past twenty to thirty years; but the economic stringency of the present situation is held to require an even more complete ' avoidance of disputes '. It is in so far as a strike must still, no less than in the past, be regarded as an exercise of social freedom, and in so far as a too ready appeal to economic necessity or political expediency in order to limit social freedom may produce far more objectionable economic (and political) evils than strikes, that strikes as we know them may be ' justified ' at present. Although much still remains to be done along stock lines—fuller joint consultation; closer touch between Union officials and membership; above all, obviation of the delays involved (sometimes by design) in the procedures to which the Unions are committed[1]; and so on—there must be some hope that the social and economic changes which are taking place may touch the more fundamental causes of strikes. The need for this has never been greater.

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[1] T. H. Marshall in *Labour Management*, Vol. xxvii, No. 282, p. 103.

[2] Mr. Walter C. Puckey, discussing the causes of strikes in an address to the Royal Society of Arts under the chairmanship of Lord Citrine, and reported in *Manchester Guardian*, 30/1/47.

[3] See Peter F. Drucker, ' Why Men Strike ', *Fortnightly Review*, February, 1947.

[4] ' . . . the immediate cause of the stoppage was the fall in earnings due to the drop in the price of fish, which, though it proved to be temporary, the men feared might be permanent and a forerunner of such a slump in the industry as took place in the immediate pre-war years' (Cmd. 6882 (*Report of Court of Inquiry under 1919 Industrial Courts Act*), 1936, p. 5.)

[5] 1917 *Commission of Inquiry into Industrial Unrest*, Cmd. 8668 (Wales), p. 23.

[6] See Lord Citrine's speech to the 1947 Yorkshire Miners' Rally.

K. C. G. KNOWLES.

APPENDIX I

Figures of workers in employment used in the tables.

These were obtained as follows. The figures of operatives in work were taken from the occupation tables of the 1931 censuses (1926 Northern Ireland) and corrected for the fact that the census was taken in April. (The occupation tables were preferred here since strikes tend to affect workers in a given occupation rather than workers of different occupations, even though they are employed in a single industry.) Figures for the years 1923 to 1939 were obtained by scaling the figures of insured workers in employment to this corrected census figure. (Figures of insured workers in employment were obtained by subtracting the average monthly number of unemployed from the July figure of insured workers.) Figures for the years 1911 to 1922 were estimated from previous censuses, the summarised Z.8 returns and other sources. From 1940 to 1945 the figures were based on the Ministry of Labour returns and the Statistical Digests and linked to the previous series.

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[1] The text of a 1945 dockers' leaflet is apposite : ' The Unions have pledged us that they are going forward, that the official machinery has been set in motion. It has been set in motion round and round, getting nowhere, nothing happening. This has been going on for years.' (Quoted in *Manchester Guardian*, 31/10/45). The strike drew marked attention to the difficulties in the way of maintaining vigorous Trade Union Branch life—a problem by no means confined to one Union.

In the case of transport, the figures of insured workers in employment were taken as characteristic of non-railway transport workers only (since most railway workers fall outside the unemployment insurance scheme). These figures were therefore corrected by a proportionate addition of railway employees on the basis of information from the Railway Staff Returns. Before 1921 the figure for transport workers had to be estimated on the basis of the limited evidence of the 1911 census, the Z.8 returns, etc.

APPENDIX 2

Results of strikes : proportions settled in various ways.

	In workers' favour.	By compromise.	In employers' favour.	(On employers' terms without negotiation, etc.).	In workers' favour.	By compromise.	In employers' favour.	(On employers' terms without negotiation, etc.).
Period	(*a*) by number of strikes :				(*b*) by number of strikers[1] :			
1911–14 ...	27%	44%	29%	(9%)	42%	44%	14%	(3%)
1936–39 ...	25%	28%	47%	(27%)	19%	25%	56%	(36%)
1915–18 ...	28%	46%	26%	(8%)	21%	60%	19%	(6%)
1940–43[2] ...	17%	25%	58%	(35%)	17%	26%	57%	(31%)

[1] Directly involved only.

[2] No annual figures relating to the results of the number of strikes, etc., beginning in each year were published after 1939. The above figures for 1940–43 are therefore taken from the monthly tables which related to strikes ending in each month. After 1943 the publication of all tables relating to the results of strikes was discontinued.

It has been suggested (Labour Research, 1939, p. 158, in comment on the Labour Gazette's annual review of strikes and lockouts) that there was ' evidently some connection ' between the lack of official support for strikes and their failure—and moreover that the fall in the number of strikes did not reflect success by more peaceful methods, since the main outstanding claims of the workers remained unsatisfied.

The meaning of all statistics of the results of strikes is, however, notoriously disputable, if only because no precision or uniformity of definition can be achieved. The comments made by many writers on the subject are only too cogent; and the only purpose in instancing these figures here is to suggest that if they can be taken as significant at all in the present context, they seem to show that since settlements in favour of employers have been increasing at the expense of other solutions, then to that extent the effect of strikes on the course of economic events has been growing somewhat less.

(It may be suggested that the classification of the results of strikes, apart from the inherent difficulties which have led to the discontinuance of the figures, may have developed inconsistencies over a period of years—for example because of the growing practice of refusing to negotiate with men on strike. In fact, however, strikes in which men returned to work pending negotiation were classified according to the results of the ensuing negotiations—only in cases where a strike interrupted negotiations already in progress was it automatically classified as unsuccessful.)

POST-WAR DEVELOPMENT OF SWEDEN'S FOREIGN TRADE[1]

The volume of Sweden's imports during the war years sank to approximately a half of the average volume that had prevailed in the years just prior to the war. A revival of imports occurred after the cessation of hostilities, which became particularly noticeable in the spring of 1946. The value of imports, expressed as a percent of gross national product, sank from 18 per cent for the years 1936–38, to 11 per cent for the war years, and to 5 per cent for 1945 ; an increase to 16 per cent occurred in 1946 and the pre-war figure of 18 per cent was again attained for the period May 1946 to April 1947. The total volume of imports for 1946 had attained approximately a pre-war level, while the level of import prices had nearly doubled compared to pre-war.

TABLE 1

The Import of Certain Luxury-Type Consumption Goods, 1936/38 and 1946/1947.

Tons (rounded figures).

	1936/38	1946	May 1946–April 1947
Eggs	740	4,300	4,600
Bananas	11,400	21,600	24,200
Grapes	5,300	5,300	6,000
Fresh apples	15,300	32,700	33,300
Fresh pears	8,100	12,800	13,200
Cocoa-beans	6,200	9,700	9,000
Chocolates and other candies	710	2,100	4,500
Biscuits	48	300	510
Canned fruits	1,800	3,800	3,900
Cigars, cigarettes	240	1,200	1,400
Volatile vegetable oils	110	170	210
Facial powders and creams	60	86	94
Perfumes and toilette waters	61	81	87
Fur goods, untreated	120	1,900	1,300
Silk fabrics, pure and synthetic	320	1,300	970
Jewellery	44	69	78

The proportion of total imports represented by consumption goods has increased from a prewar figure of 20 per cent to 28 per cent for 1946–47; imports of certain luxury-type goods have been especially large during the past year (see table 1). Imports of coal and coke, as well as certain important raw materials used in domestic, industrial and agricultural production, in contrast have remained far below the pre-war level because of foreign supply difficulties (see table 2). The current significance of imports as a sustaining factor to the domestic economy does not correspond to their value in this respect before the war, even though the total volume of imports has attained a pre-war level.

The value of exports expressed as a percent of gross national product, which amounted to 16 per cent during 1936–38, sank to 7 per cent during the war years, amounted to 9 per cent in 1945, and subsequently rose to 12 per cent in 1946. The total volume of exports in 1946 appears to have attained a

[1] Summary of a Report published by The Economic Research Institute, Stockholm. Translated into English in the Institute by Ralph E. Holben.

TABLE 2

The Volume of Imports of More Important Types of Commodities, 1936–1946.
1,000 tons

	1936–38	1939	1940–44	1945	1946
Wheat	51.1	39.1	28.9	43.4	36.4
Coffee	48.9	56.0	19.2	27.5	49.2
Oleaginous seeds and fruits ...	219.2	223.6	48.9	27.8	42.4
Vegetable fat oils	37.4	45.4	12.7	2.8	10.2
Oil cakes	161.6	133.3	92.4	80.0	75.4
Maize	144.5	42.4	16.4	9.1	85.6
Cotton	34.3	46.9	24.3	12.0	18.9
Wool	9.4	13.3	6.8	7.2	19.2
Cotton-yarn	3.8	4.2	1.2	1.1	2.6
Wool-yarn	3.3	4.4	0.9	0.1	3.0
Cotton-fabrics	4.8	6.8	1.8	1.1	6.3
Wool-fabrics	1.6	2.4	1.5	0.6	2.4
Hides	14.4	19.1	6.4	6.2	13.3
Pig-iron	144.3	196.8	64.3	17.4	91.1
Wrought-iron	429.2	553.1	254.2	33.1	424.2
Copper	46.8	64.3	6.5	14.9	51.4
Tin	2.2	3.0	0.5	0.4	0.7
Lead	20.8	44.1	5.2	1.4	18.6
Coal (mineral)	5,998	6,342	3,154	272	2,432
Coke	2,116	2,339	1,402	89	1,006
Mineral-oils (crude)	591	830	110	137	1,310
Petrol (1,000 litres)	670	788	109	49	605

level equivalent to about two-thirds of that which existed in the years immediately preceding the war. This situation has not arisen from difficulties in finding markets for Swedish exports, but has resulted primarily from supply difficulties within the Swedish economy. Such difficulties have resulted partly from the fact that production in Sweden was impeded by limited supplies of raw materials within the country and of insufficient imports of fuel, iron, and other important commodities and partly from the fact that home consumption of such raw materials and exported commodities have increased sharply and in competition with demand for export deliveries. The cutting of timber to supply export requirements declined because of the increased need to use such cut timber for fuel purposes; only about a half of the timber cut in 1946 was used for export production, as contrasted to about two-thirds during the years just before the war. In 1946 less than a fifth of those employed in some of the larger manufacturing industries (of the engineering mechanical type) were producing for export in contrast to a third before the war. The volume of exports of certain important commodities is presented in table 3.

Import prices have approximately doubled as compared to before the war. The inflationary effect of the continued rise in prices in world markets upon the Sweish economy was reduced as a result of the appreciation of the Swedish krona in July 1946. Import prices rose however, in spite of the appreciation, by from 5—10 per cent from early in the summer of 1946 to early in the summer of 1947. Export prices in 1946 were about 80 per cent above the pre-war level. The level attained has been partly determined by Sweden's cautious export price policy. After the government's export price

TABLE 3

Exports of Certain Important Commodities, 1936–1946.

		1936–39	1940–44	1945	1946
Sawn and planed wood	1,000 cub. m.	3,383	1,463	2,622	1,684
Paper pulp : mechanical	1,000 tons	318	26	193	265
bleached sulphite	,,	359	262	263	397
unbleached ,,	,,	814	125	551	572
bleached sulphate	,,	95	23	41	70
unbleached ,,	,,	700	191	520	500
Paper, newsprint	,,	179	56	78	121
wrapping paper	,,	272	106	92	217
Pig-iron	1,000 tons	95	47	4	17
Wrought-iron	,,	204	151	106	93
Iron ore	,,	12,873	8,631	1,229	5,325
Electric generators, motors, etc.	mill. kronor	16	11	12	21
Electric fans, vacuum, cleaners, etc.	,,	11	8	4	10
Telegraph and telephone apparatus	,,	10	9	18	33
Automobiles and automobile parts	,,	17	5	11	27
Ships	,,	54	21	140	60
Ball-bearings, roller-bearings and their parts	,,	46	58	41	67

control upon products of the forest industry was raised in the spring of 1947, exporters of such products under certain conditions have been free to sell at the best prices they could obtain. A sharp increase in the prices of these products has resulted; for example, the prices for sawn timber products have thereby been raised from £30 to £42 per standard and for unbleached chemical paper pulp from 320 to 450 kronor per ton. A few alternative price index figures for import and export commodities are given in table 4.

The Swedish merchant marine declined somewhat during the war, but it had surpassed the pre-war level in terms of total tonnage by 1946. The fleet had undergone considerable renovation and modernization by that time. The gross receipts of the merchant marine in international trade amounted to between 300 and 400 million kronor for the years just before the war, to something over 500 million kronor for 1945, and to about 850 million kronor for 1946. The merchant marine's net contribution to the balance of payments amounted to about 200 million kronor in the years just before the war, to 300 million kronor in 1945, and to 500 million kronor in 1946.

Sweden had on the average a slight import balance of trade during the inter-war period, but the average surplus in the current balance of payments during this period amounted to about 200 million kronor a year. This surplus declined during the late 1930's in comparison to the late 1920's primarily because exports stagnated in relation to the development of imports (see Table 5). A large volume of imports occurred in 1939 for the purpose of stockpiling, which brought about an appreciable deficit in the balance of payments as well as in the balance of trade.

After the cessation of hostilities exports revived more rapidly than imports because, among other things, of relief shipments and exports out of stocks. There appeared in 1945, therefore, an export trade balance of 674 million

TABLE 4. *Alternative Price Index Series.* 1938=100.

	Import commodities			Export commodities		
	K.K.[1] 1935 weights	According to trade statistics 1938 weights	According to trade statistics Actual weights[2]	K.K.[1] 1935 weights	According to trade statistics 1938 weights	According to trade statistics Actual weights[2]
1946 Jan.-Feb.	229	195	183	173	163	174
June...	224	188	175	179	170	181
July	224	191	178	179	172	181
August	225	189	184	176	175	179
1947 Jan.-Feb.	233	202	185	178	179	184
May	238	211	189	213	205	215

[1] Swedish Board of Trade statistics.

[2] The monthly distribution of imports forms the basis of the ' weighting ' of this series. Changes in the index numbers as between different months is determined both by changes in the composition of imports and by price changes during each month. Index numbers calculated according to ' actual weights ' must not therefore be used for an analysis of the development during 1946 and 1947, but only for the purpose of judging the situation then in relation to that existing in 1938.

TABLE 5. *The Current Balance of Payments, 1926/28–1946.*

	1926/28	1929	1932/33	1936/38	1939	1940/44	1945	1946
Imports	1,594	1,783	1,126	1,946	2,499	1,790	1,084	3,420
Exports	1,537	1,812	1,013	1,786	1,889	1,203	1,758	2,530
Trade Balance	—57	+29	—113	—160	—610	—587	+674	—890
Net freight income	+178	+205	+116	+165	+237	(+300)	+300	+500
Income from service of foreign ships[1]	...	...	+15	+26	+31	(+30)	+30	+50
Interest and dividends	+17	+30	+103	+97	+84	(+80)	+45	+30
Other invisible items	+11	+5	+26	+1	—4	...	+64	+90
Current Balance of Payments	+149	+269	+147	+129	—262	...	+1,113	—220

[1] Figures not available for 1926/28 and 1929 ; expenses for service of Swedish ships abroad included under ' net freight income'

kronor and a surplus in the current balance of payments of at least 1,100 million kronor. The increase in imports in 1946 led to changed conditions; for that year it was calculated that there existed an import balance of 890 million kronor and a deficit in the current balance of payments of 220 million kronor. The import balance for the twelve month period May 1946 to April 1947 rose to 1,280 million kronor and the deficit in the current balance of payments to 600 million kronor. At the same time there occurred a loss of foreign exchange which, according to the Riksbank, amounted to 600 million kronor for 1946 and to 1,500 million kronor for the period May 1946, to April 1947. Changes in the nature of payments made to foreign countries, especially advanced payments on imports, have evidently played a more significant role in connection with the loss of foreign exchange than did a deficit in the balance of trade.

A change in the pattern of Sweden's foreign trade took place at the same time that a deficit in the total balance of payments appeared. Germany, which before the war was the most important supplier of Swedish imports, is no longer of significance in that respect. In addition many other countries in Europe have a much lower capacity to export after the war. As a result ' hard currency countries' such as the United States, Switzerland, Portugal and countries in Latin America have increased their contribution to the value of Sweden's imports from about a fourth for before the war to about a half at the present time. A similar but much weaker adjustment has taken place with respect to Swedish exports ; exports to ' hard currency countries ' have increased from 16 to 30 per cent of total exports (exports to the U.S. however, sank from 11 per cent of the total for 1936–38 to 7 per cent for 1946).

The deficit in the balance of payment with hard currency countries expressed itself in a decline in foreign exchange. The Riksbank's and the National Debt Office's supply of gold, U.S. dollars, and Swiss francs, when calculated in terms of the current rate of exchange, sank from 2,196 million kronor at the end of 1945 to 1,583 million kronor at the end of 1946; such supplies of foreign exchange at the end of June 1947 amounted to only 628 million kronor.

(million kroner)	31/12 1945	31/12 1946	1/7 1947
Gold	1,735	1,371	606
U.S. dollars	456	205	18
Swiss francs	5	7	4
Total	2,196	1,583	628
Pound Sterling	432	431	306
Other	108	183	137
Total gold and foreign exchange ...	2,736	2,197	1,071

Private short term assets in North and South America, Switzerland and Portugal amounted on April 30th, 1947 to 324 million kronor while such assets in pound sterling at the same time were 116 million kronor; in these figures the assets and liabilities of the commercial banks are not included.

It has been estimated that receipts from exports in 1947 should increase by about 500 million kronor, so that total exports for that year should amount to at least 3 billion kronor. As far as the products of the forest industry are concerned, it is estimated that compared to 1946 about the same quantity of timber products and wood pulp and a somewhat larger quantity of paper are available for export this year; it is expected that the increase in prices, which ensued during the spring of 1947, in connection with such increased supplies will entail an increase in the total value of export of about 350 million kronor. Ships are being built at present on a large scale for export, especially for export to Norway. There is furthermore reason to expect some increase in the exports of iron, steel, and various products of manufacturing industry. Assuming that freight income and other items in the balance of payments yield the same income as during 1946, receipts in the current balance of payments should amount to 3,680 million kronor. Two hundred million kronor of this amount can be expected to correspond to the utilization of previously granted credits (for ship supplies, to Norway and for various goods intended for Poland and the Soviet Union).

A similar analysis can not be made for the development of imports during 1947. Imports will be determined partly by stipulations contained in trade treaties, by transitional provisions contained in the recent widening of import regulations, and partly by import regulations that may be put into effect in the future. Certain calculations have been made in this investigation in order to clarify the implications of two conceivable courses of import development —the higher estimate arrived at a total import figure for 1947 of 4,100 million kronor, based on the level of imports attained during the first four months of the year; the lower estimate was 3,480 million kronor, which corresponded to calculated disposable income arising in the 1947 current balance of payments after deducting a certain amount, which represents drawings against previously granted export credits.

Both of these alternatives have been introduced into a national budget analysis in order to explain the source of disequilibrium now existent in the Swedish economy.[1] The budget for 1947 is constructed on the assumption of an increase in productivity of 2.5 per cent per year, which is in accordance with the pre-war rate of increase in productivity. Two different alternative forms of development have been devised for investments : the one is based upon that volume of investment which is most likely to result from the government's 1947 budget for the control of total investment in the construction industry (alternative A); the other relates to a smaller volume of investment, which would probably have resulted had there been no time lag between the budget's inception and the effective application of controls (alternative B). It is estimated that consumption should increase by 10 per cent as a consequence of a 10—15 per cent increase in wage income, which became effective in the beginning of 1947. Finally, it is assumed that prices remain unchanged.

The national budget analysis portrays the disequilibrium in the Swedish economy as a disparity between planned investment and assumed voluntary

[1] The national budget construction was made by Dr. Ingvar Ohlsson

saving of about 2 billion kronor. In accordance with the method of calculation utilized, this disparity may be expressed either as a decline in inventories of 1.6 billion kronor plus a deficit in the balance of payments of 0.4 billion kronor (alternative A), or as a reduction in consumption by about 2 billion kronor in relation to that level of consumption which would arise if consumption were entirely free and unhampered by prevalent restrictions (alternative B).

The calculations have been based on the situation existing prior to June 1947 when a public announcement was made concerning a stiffening of the government's economic policies. A planned reduction of construction and investment activity by the government, the net effect of which has been estimated to amount to 300 million kronor in 1947, provides an indication of this new line of policy. Other measures have been taken which are aimed at a further reduction of the gap between supply and demand which prevails in different areas of the economy. The estimated gap or disparity between demand and supply must be eliminated in the actual future course of economic development in one or more of the following ways : the actual future level of investment and consumption may prove to be less than has been assumed, prices may rise, inventories may fall, etc. (Sweden still retains most of its war time price, rationing, and raw material allocation controls).

A discussion of the trend of development in Sweden's foreign trade must be closely associated to two aspects of the maladjustment in Sweden's balance of payments, which have appeared during the past year : a deficit in the total current balance of payments and a change in the division of international payments between Sweden and different currency areas.

The latter situation has obviously been a result, on the one hand, of the economic difficulties created by the war for a number of the European countries and, on the other hand, of the greatly enhanced productive capacity of the United States with the consequent division of the world into ' weak ' and ' strong ' currency countries. The foreign credit policy of the United States has been a decisive factor in that respect. If such assistance is not sufficiently extensive, the European countries which have been most severely affected by the war will be forced to accept a much more gradual restoration of consumption and investment activity; such an outlook will require a longer and more strict adherence to direct regulation of economic life than otherwise should have been necessary. In such a case Sweden would be forced to take special measures to control its export trade, so that it could be better adjusted to the geographical distribution of Sweden's imports. A condition of freer world trade and full convertibility of international currencies is the more favourable alternative from Sweden's point of view.

Even the defiicit in the current balance of payments is in part a result of war time conditions. Swedish exports, as well as domestic production, have been hampered by an insufficient import of important raw materials such as fuel and iron. Increased imports of such materials should serve significantly to strengthen Sweden's balance of payments position. Imports have been stimulated by the need for the building up of inventories depleted during the period of war-time trade restrictions and for the replenishment of worn-out capital equipment. Exports have been limited even by the fact that Sweden's timber resources do not permit an increase in the rate of cutting timber. The disequilibrium in Sweden's balance of payments must, above all, be associated with the ' inflationary gap ' and the status of ' overfull employment ' which prevails within the economy. The abnormal propensity to import should decline once a better balance is obtained within the domestic economy through an adjustment of nominal incomes to real income measured in terms of current prices and through a limitation of investment to the current volume of voluntary saving. A considerable reduction in the size of the ' inflationary gap ' would seem to be a first pre-requisite to the restoration of equilibrium in Sweden's current balance of payments and to the eventual abolition of import regulations.

In the long run Sweden's balance of payments position will be primarily determined by the level of costs in Sweden relative to that existing in other countries and by the general course of economic development. The nominal increase in prices and money incomes, since the period just prior to the outbreak of war, has been greater in England and the United States than in Sweden. The increase in prices in the United States since the end of the war has been much greater than in Sweden, even after adjustments have been made to account for a change in the rate of exchange. This comparison hardly justifies an a priori judgement concerning the relative competitive position existing between the two countries. One's opinion in this respect must be based upon a closer examination of the development of costs in these particular spheres where direct competition between the two countries is very much in evidence. Subsequent developments in those spheres will be of importance.

The level of employment within the domestic economy is of the greatest significance for the development of both imports and exports. The inter-war period revealed that imports increased more rapidly than exports during a period of economic expansion. The propensity to import appears to increase as the economic system approaches a status of full-employment. It appears that, if a policy of full employment is pursued over an extended period of time, it may be expected to result in the maintenance of a high import propensity. A strong demand for imports can be satisfied only to a limited extent through the substitution of an expanded volume of domestic output, since imports are largely composed of fuel and raw materials, which could hardly be obtained in sufficient volume within the domestic economy, and of products the cost of which would be considerably higher were they to be produced domestically rather than be imported. There therefore appears to be no reason to believe that Sweden could attain any significant degree of self-sufficiency except at a substantial sacrifice in the standard of living of her people. A continued expansion in the volume of exports must be achieved, if a policy of full-employment is to be compatible with equilibrium in the balance of payments.

GUSTAV CEDERWALL.

TABULAR APPENDIX.

EDITORIAL NOTE

The following tables illustrate the economic developments in U.S.A. and individual European countries by presenting the trend of production, prices and foreign trade in recent months compared with typical war and pre-war years.

Explanation of symbols :

... the figure is not available.
( ) figures provisional or approximate.
— figure is negligible.

TABLE I. UNITED STATES.

Index Nos. 1935–39=100[1]	Monthly Averages			1947					
	1941	1945	1946	Jan.	Feb.	Mar.	Apr.	May[2]	June[2]
Income Payments—Index	138	239	245	264	264	265	263	265	...
Consumer Expenditures—Quarterly Index	124	179	216	...	...	236	...	...	...
Dept. Store Sales—Value Index	133	207	264	265	268	273	276	291	288
Vol. Index of Farm Mktgs.	115	137	138	166	148	157	...	...	...
Employmt.[3], millions	35.7	38.1	39.0	41.8	41.9	42.1	41.8	41.9	42.2
Unemploymt., Millions	5.0	1.1	2.3	2.4	2.5	2.3	2.4	2.0	...
Buildg. Contr. Awarded :									
Value Index	213	119	266	252	263	230	232	216	...
Vol. Index[4]	183	86	168	143	149	129	130	119	...
Ind. Production Index :									
Durable	201	274	192	221	222	225	222	220	...
Non-Durable	142	166	164	177	176	176	172	170	...
Minerals	125	137	136	146	146	148	142	152	...
Manuf. Orders—Index[5]	203	189	211	240	253	249	242	236	...
Manuf. Inventories : Index[5]	158	164	203	209	213	217	222	225	...
Wholesale Price Index :									
Farm Products	108	169	198	217	224	240	233	231	234
Foods	105	134	165	198	205	212	205	202	205
All others	110	123	136	157	158	162	163	163	163
Cost of Living Index	105	128	139	153	153	156	156	156	157
Facty. Av. Hrly. Earngs. cts.	73	102	108	116	117	118	119	121	...
Imports : Total, Mill. $	279	344	410	533	435	444	512	474	...
from Europe, Mill. $	24	...	66	76	60	50	6.6	...	...
Exports : Total, Mill. $	427	820	812	1116	1153	1327	1299	1423	1242
to Europe, Mill. $	128	...	342	437	457	484	49.6	...	...
Lend-Lease Exports, Mill. $	61.7	463	54.5	8.4	3.5	1.7	2.0	3.8	...

Sources : *Bureau of the Census* for Unemployment ; *U.S. Department of Commerce* for Income Payments, Consumer Expenditures, Farm Marketings, Manufacturer's Orders and Inventories, and Foreign Trade ; *U.S. Department of Labor* for Employment, Prices and Wages ; *Federal Reserve Board* for Dept. Store Sales, Building Contracts and Ind. Production.

[1] All index numbers, except those of prices and of manufacturer's orders and inventories, are adjusted for seasonal variations.

[2] Partly provisional.

[3] All employees in non-agricultural establishments, unadjusted figure.

[4] Value Index deflated with the (Engineering News Record) Index of Construction Costs.

[5] 1939=100.

TABLE II. UNITED KINGDOM[1]

	Unit	Monthly Averages 1938	1945	1946	1947 Feb.	Mar.	Apr.	May	June	July
Production of :										
Coal (Wkly. Av.)	Mill. tons	4.4	3.5	3.6	3.8	3.8	3.7	3.8	3.9	3.3
Steel (Wkly. av.)	1,000 tons	200	227	244	206	196	236	244	254	212
Cement	1,000 tons	643	338	548	192[3]	366[2]	601[2]	534[2]	586[2]	...
*Bricks	Millions	650	102	288	247	277	349	395	400	...
Passenger Cars	Thousands	28.0	1.4	18.3	9.9	22.1	24.2	27.5	29.3	...
Comm. Vehicles	Thousands	8.8	10.2	12.2	5.8	11.3	12.3	14.3	14.8	...
Merch. Vessels[4]	Mill. gross tons	1.0	1.46	1.76	1.76	1.80	1.83	1.86	1.86	...
Electricity	1,000 Mill. kwh	2.0	3.1	3.4	3.7	4.0	3.4	3.1	2.8	...
Gas (weekly av.)	Mill. therm	31.9	39.1	42.4	53.3	50.9	43.5	39.9	36.7	...
*Perm. Houses[5]	Thousands	30.0	0.22	4.12	3.84	5.98	8.74	10.58	10.80	...
*Employmt: Total[6]	Millions	17.9	16.3	17.3	...	18.0	18.2	18.3	18.4	...
*Manuf. Ind.	Millions	6.8	6.8	6.6	...	7.0	7.0	7.0	7.1	...
*Manuf. Exports	Millions	1.0	0.41	1.31	...	1.47	1.48	1.49	1.51	...
*Unemployment[7]	Thousands	1,688	103	359	1874	765	427	332	272	256
*Retail sales (wkly.)	1938=100	100	116	137	135	148	148	156	148	...
Wholesale Prices										
Food and Tobacco	„	100	163	163	163	163	168	169	171	173
Ind. Prod.	„	100	169	178	191	191	193	196	196	200
Cost of Living	„	100	130	130	130	131	130	130	130	...
Weekly Wage Rates	Sept. '39=100	...	150	162	165	166	166	167	167	...
Ret. Imports	£ Mill.	77	92	108	113	130	147	153	154	179
U.K. Exports	„	39	33	76	76	83	83	90	93	110
Terms of Trade[8]	1938=100	100	93	95	95	96	94	93	93	...

Sources : Monthly Digest of Statistics ; Ministry of Labour Gazette ; Board of Trade Journal.

[1] Figures for items marked * refer to Great Britain.

[2] Four weeks. [3] Five weeks.

[4] Tonnage under construction at end of period, 100 gross tons and over. [5] Completed.

[6] Including employers and self-employed, but excluding Forces, Auxiliary Services, Civil Defence, Police and private domestic service. All annual employment figures refer to mid-year.

[7] Number of insured workers registered as wholly unemployed or temporarily stopped. Mid-yearly or mid-monthly figures.

[8] Ratio of export prices to import prices.

TABLE III. FRANCE

	Unit	Mthly. Averages 1938	1945	1946	1947 Jan.	Feb.	Mar.	Apr.	May	June
Production of :										
Coal[1]	Mill. m. tons	4.0	2.9	4.1	4.6	4.3	4.6	4.2	4.0	3.4
Electricity	000 Mill. kwh	1.5	1.4	1.8	2.2	2.0	2.2	2.1	2.1	2.0
Steel	Mill. m. tons	518	134	369	486	449	498	508	505	...
Cement	000 m. tons	290	127	281	284	262	308	316	363	312
Comm. Vehicles	Thousands	3.3	2.7	5.2	6.6	6.4	6.8	6.6	5.0	5.7
Passenger Cars	„	15.2	0.1	2.5	5.0	4.9	6.1	6.5	5.1	4.8
Cotton Fabrics	000 m. tons	12.1	2.7	8.4	10.3	10.5	11.7	11.9	11.3	...
Building plans[2]	000 cbm	706	155	413	715	600	...	...	...	...
Wagon loadings (daily)	Thousands	41	17	30	33	35	35	36	36	...
Employment[3]										
Numbers	1939=100	...	88	93	97	...	...	...	...	...
Hours worked	„ „	...	92	99	104	...	...	...	...	...
Wholesale prices[4]	1938=100	100	375	648	867	882	860	847	946	904
Retail prices[5]	„ „	100	393	645	856	858	838	837	886	935
Imports	000 Mill. frs.	3.8	4.6	19.5	23.7	25.8	27.4	27.6	32.4	29.9
Exports	„ „ „	2.5	0.9	8.5	14.5	17.1	16.3	20.6	18.8	19.7

Source : Bulletin de la Statistique Générale de la France.

[1] Incl. lignite. [2] In Paris and 98 towns. [3] Wage-earners. Quarterly figures, base : April 1939=100. [4] 1938 weights. [5] Retail prices in Paris of 34 articles.

TABLE IV. BELGIUM.

	Unit	Mthly. Averages			1947				
		1939	1945	1946	Jan.	Feb.	Mar.	Apr.	May
Production :									
Total Industry ...	1936–38=100	95	34	80	95	85	90	...	112
Coal	Mill. m. tons	2.5	1.3	1.9	2.15	1.96	2.20	2.18	2.08
Steel	000 m. tons	259	61	191	231	206	229	234	...
Cement	,, ,, ,,	213	54	158	181	123	145	217	236
Electricity ...	Mill. kwh	466	382	520	646	579	604	579	...
Textile Ind. ...	1938=100	113	38	92	114	104	115	116	...
Paper Ind. ...	,, ,,	120	26	109	124	118	125	141	...
Buildg. Activity[1] ...	Thousands	2.2	1.1	2.4	2.2	1.6	...	...	...
Unemployment[2] ...	,,	195	145	67	90	131	94	51	45
Retail Prices ...	1936–38=100	106	329	334	333	332	330	331	332
Imports	000 mill. frs.	1.6	1.1	4.4	6.0	5.3	6.1	6.5	6.2
Exports	,, ,, ,,	1.8	0.3	2.5	2.7	4.3	4.8	5.3	5.5

Source : Institut National de Statistique ; Banque Nationale de Belgique.

[1] Number of units newly constructed and reconstructed. [2] Daily of registered unemployed.

TABLE V. NETHERLANDS.

	Unit	Mthly. Averages			1947					
		1939	1945	1946	Jan.	Feb.	Mar.	Apr.	May	June
Production :										
Coal	000 m. tons	1,072	424	693	833	803	885	818	779	829
Electricity ...	Mill. kwh	223	93	225	300	272	287	258	...	...
Bricks	Mills.	91	7.6	45.3	70.4	59.3	57.4	48.4	...	...
Cement	000 m. tons	45	21.2	33.6	9.0	17.5	25.6	51.3	54.4	...
Butter	000 m. tons	9	3.2	4.4	2.3	1.8	2.4	3.6	...	...
Cheese	000 m. tons	10.1	3.1	5.4	1.5	0.6	2.4	5.0	...	...
Unemployed[1] ...	000's	235.6	...	53.1	51.5	55.8	48.3	31.0	24.1	...
Retail trade[2] ...	1938=100	113	...	151	168	143	194	215	...	...
Wage rates :										
Industry	1938–39=100	101	131[3]	165	165	166	166	165	165	...
Agriculture ...	,, ,, ,,	100	225[4]	241	241	241	241	...	...	...
Imports	Mill. fl.	126	...	179	201	313	256	339	357	...
Exports	,, ,,	81	16	65	108	97	138	143	135	...

Source : Central Bureau voor De Statistiek ; Rotterdamsche Bankvereeniging.

[1] Registered wholly unemployed excluding public relief workers.

[2] Value of turnover of department and chain stores. [3] Revised figure. [4] December.

TABLE VI. DENMARK

Index Nos. 1938=100	Unit	Monthly Averages			1947				
		1939	1945	1946	Feb.	Mar.	Apr.	May	June
Production :									
Industrial ...	Index	105	79	96	105	98	99	100	100
Butter	000 m. tons	15.2	11.0	11.7	8.6	10.1	11.0	12.6	13.7
Meat (Pork) ...	,, ,, ,,	27.4	15.1	16.9	12.7	14.7	18.5	17.1	18.2
Electricity ...	Mill. kwh	69[1]	76	88	108	101	102	96	96
Wholesale Prices ...	Index	105	190	188	201	200	202	204	205
Cost of Living ...	,,	101	159	158	159	...	...	162	...
Imports	Mill. kr.	145	58	236	166	157	219	300	367
Exports	,, ,,	132	75	134	104	115	196	236	190

Source : Danmarks Statistics, Statistiske Efterretninger ; United Nations, Monthly Bulletin of Statistics.

[1] 1938

TABLE VII. NORWAY

Index Nos. 1938=100 ...	Unit	Monthly Averages 1939	1945	1946	1947 Jan.	Feb.	Mar.	Apr.	May
Ind. Production ...	Index	106	69	100	109	119	114	115	123
Electricity gen. ...	Mill. kwh	851	820	938	1,161	1,052	1,004	942	...
Retail Turnover ...	Value Ind.	105	120	182	175	175	175	...	...
Cost of living ...	Index	102	156	160	160	161	161	162	162
Imports	Mill. kr.	114	100	183	275	273	308	351	...
Exports	„ „	67	27	100	109	109	108	131	...

Source : Central Bureau of Statistics.

TABLE VIII. SWEDEN

Index Nos. 1939=100	Unit	Monthly Averages 1939	1945	1946	1947 Feb.	Mar.	Apr.	May
Ind. Production	Index	100	85	103	104	104	106	105
Ind. Employment[1] ...	„	100	101	116	117	119	120	...
Unemployment[2]	Per cent	9.2	4.5	3.2	4.9	4.2	2.6	...
Steel Production	000m. tons	99	100	101	97	101	101	110
Cost of Living ...	Index	100	149	149	152	153	153	...
Imports	Mill. kr.	204	91	61	334	279	355	460
Exports	„ „	157	147	210	119	139	220	251

Source : Index, Svenska Handelsbanken ; Quarterly Review, Skandinaviska Banken ; United Nations, Monthly Bulletin.

[1] Including mining. [2] Percentage of trade union membership.

TABLE IX. SWITZERLAND

Index Nos. 1938=100	Unit	Monthly Averages 1938	1945	1946	1947 Feb.	Mar.	Apr.	May	June
Employment :	Quart.								
All Industries ...	Index	100	110	123	...	131	...	...	133
Building	„	100	89	108	...	110	...	...	129
Metal Ind. ...	„	100	122	138	...	144	...	...	146
Chemical Ind. ...	„	100	130	157	...	168	...	...	173
Textile	„	100	76	87	...	94	...	...	95
Food Ind. ...	„	100	106	120	...	125	...	...	126
Electricity gen.[1] ...	Mill. kwh	448	666	696	467	595	675	764	750
Building permits :									
New Flats ...	Numbers	703	752	1,043	946	1122	1362	1372	1107
Factories[2] ...	„	93	167	267	...	274[3]	...	...	291[5]
Tourism[4]	Thousands	630	264	506	544	481	551	606	1244
Cost of Living ...	Index	100	152	152	155	155	156	158	159
Imports	Mill. frs.	134	102	285	312	391	405	408	379
Exports	„ „	110	123	223	250	283	258	265	299

Source : Schweiz. Nationalbank ; Département Fédéral de l'Economie Publique.

[1] Public power stations. [2] Incl. extensions and structural changes.

[3] Monthly average, 1st quarter. [4] Number of nights spent by foreign tourists in Swiss hotels. [5] Monthly average, 2nd quarter.

TABLE X. ITALY.

	Unit	Monthly Averages 1939	1945	1946	1947 Jan.	Feb.	Mar.	Apr.	May
Production :									
Electricity	000 Mill. kwh	1.3	0.9	1.3	1.2	1.0	1.3	1.5	1.8
Steel ...	000 m. tons	189	34	...	...	...	...	...	...
Unemployment	Millions	...	...	1.7	2.2	2.8	2.2	...	...
Coal Imports ...	000 m. tons	1,100[1]	...	353[2]	350	568	505	642	792
Cost of Living[3]	1938=100	...	...	...	3663	3723	3829	4182	...
Imports[4] ...	000 Mill. lire	0.9	...	...	19.3	22.3	40.8	...	...
Exports ...	„ „ „	0.9	...	...	13.7	12.7	15.6	...	...

Source : Instituto Centrale di Statistica ; United Nations, Monthly Bulletin of Statistics.

[1] Average 1935, 1937 and 1938.

[2] Average April-December. [3] New Index. [4] Incl. U.N.R.R.A.

TABLE XI. FINLAND.

Index Nos. 1939=100	Unit	Monthly Averages			1947					
		1939	1945	1946	Jan.	Feb.	Mar.	Apr.	May	June
Production :										
Home Ind.	Index	100	56	74	77	100	91	90	83	84
Export Ind.	,,	100	51	69	81	82	85	85	86	86
Electricity	Mill. kwh	259	247	244	270	242	254	226	237	...
Cement (Consmp.)	Index	100	52	60	...	...	93	...	...	53
Wholesale Prices	,,	100	365	571	601	605	633	640	648	652
Cost of Living	1938–9=100	101	282	450	471	482	524	546	559	567
Imports	Mill. Mark.	631	572	2,027	2825	2304	1138	1464	3845	3939
Comm. Exports	,, ,,	643	436	1,920	1961	1170	783	2108	4855	4585
Reparation Deliv.	,, ,,	...	585	731	519	636	784	450	726	841

Source : Unitas, Quarterly Review of Trade Conditions in Finland ; Monthly Bulletin, Bank of Finland.

TABLE XII. POLAND.

	Unit	Mthly. Averages			1946		1947			
		1938[1]	1945	1946	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.
Production :										
Coal	Mill. m. tons	3.2	2.0	3.9	4.5	4.2	4.5	4.1	4.8	4.7
Pig Iron	000 m. tons	74	21	61	60	56	55	53	64	...
Steel	,,	120	45	102	112	111	110	95	121	...
Cement	,,	143	33	117	107	132	56	54	...	...
Glass	,,	2.1	3.5	3.4	3.8	4.4	4.6	4.1	...	...
Paper	,,	17.1	3.4	12.4	14.7	15.1	13.8	10.8	...	...
Electricity ...	Mill. kwh	319	418	476	556	578	580	...	...	...
Cost of living[2] ...	Index[2]	...	77[3]	96	111	116	118	119	125	129

Source : Central Statistical Office of the Republic of Poland.

[1] Pre-war frontiers.

[2] At Warsaw ; base : April, 1945=100. The calculation is based on free-market prices supplied by the Municipality.

[3] Average April-December.

TABLE XIII. CZECHOSLOVAKIA.

	Unit	Mthly Averages			1947					
		1937	1945	1946	Jan.	Feb.	Mar.	Apr.	May	June
Production :										
Coal	000 m. tons	1,398	952	1,181	1395	1329	1438	1371	1323	1242
Electricity ...	Mill. kwh	334	341	464	571	537	567	527	527	514
Pig Iron	000 m. tons	140	48	80	113	103	122	116	124	123
Steel	,,	192	79	139	191	172	205	197	189	186
Cement	,,	106	...	77	...	...	...	...	...	...
Wh'sale Prices[1] ...	Jan.-March 1939=100	...	154	284	301	298	300	294	295	295
Cost of living[2] ...	Jan.–June 1939=100	...	168	305	306	309	309	292	291	291
Imports	Mill. Kr.	915	76[3]	853	1529	1512	1965	2262	2853	2693
Exports	,, ,,	996	49[3]	1195	1938	1708	1814	2452	2580	2479

Source : Zivnostenka Banka, U.N. Monthly Bulletin. Statistic Bulletin of Czechoslovakia.

[1] Bohemia, Moravia and Silesia ; from January, 1946, some products of Slovakia.

[2] At Prague. [3] May to December.

TABLE XIV. HUNGARY.

	Unit	Mthly. Averages 1937	1938	1945	1946	1946 Nov.	Dec.	1947 Jan.	Feb.	Mar.
Production of :										
Coal	000 m. tons	76	87	58	60	69	67	82	75	81
Lignite	,, ,,	671	693	343	466	561	518	628	567	643
Pig Iron	,, ,,	30	28	2	13	22	18	16	18	23
Bauxite	,, ,,	44	45	...	8	13	9	10	...	...
Petroleum... ...	,, ,,	0.2	3.6	58	57	53	55	55	48	53
Wagon loadings ...	Thousands	108	114	...	47	71	57	53	...	...
Imports[1]	Mill. fl.	140	119	...	35	57	59	65	59	...
Exports[2]	,, ,,	171	151	...	41	81	94	63	47	...

Source : Office Central Hongrois de Statistique.

[1] Ecluding U.N.N.R.A. imports.

[2] Excluding reparation deliveries.

TABLE XV. BULGARIA

Index Nos. 1939 = 100	Unit	Monthly Averages 1939	1945	1946	1946 Dec.	1947 Jan.	Feb.	Mar.	Apr.	May	June
Industrial Prodctn. :	Index	100	106	116	117	94	104	118	116	127	144
Investment Goods	,,	100	81	115	109	70	85	107	124	174	167
Food, Drink, Tob.	,,	100	42	99	80	50	55	54	56	58	53
Other Cons. Ind. ...	,,	100	112	117	125	106	116	131	127	136	157
Electy. Generated	Mill. kwh	22	33	36	44	38	37	40	37	38	...
Wholesale prices ...	Index	100	550	627	667	687	693	694	700	685	687
Cost of Living ...	,,	100	509	573	601	626	640	632	631	611	631
Imports	Mill Leva	433	485	1,460	3254	1080	1200	1147	2050	1093	1012
Exports	,,	505	1,019	1,245	1989	1364	720	1704	1259	1044	3124

Source : Direction Générale de la Statistique, Bulletin Mensuel (Sofia).

TABLE XVI. GERMANY : BRITISH ZONE.

	Unit	Monthly Averages 1936	1946	1947 Jan.	Feb.	Mar.	Apr.	May	June
Ind. Production :	1936=100	100	31	28	27	30	33	34	...
Prod. Goods[1] ...	,,	100	36	31	30	33	37	38	...
Cons. Goods ...	,,	100	21	18	18	22	23	23	...
Prod. of :									
Coal (daily) ...	000 tons	390	178	245	227	233	211	216	216
Steel	,,	1,156	194	149	163	217	212	214	...
Cement ...	,,	445	107	75	64	71	124	159	...
Potash	,,	31	17.8	14.6	8.7	1.7	14.5	20.4	...
Cotton Yarn ...	,,	10.5[2]	1.7	2.0	2.1	2.4	2.4	2.4	2.5
Imports	Mill. £	...	7.2	...	...	...	...	...	...
Exports	Mill. £	...	2.9	2.1	2.0	2.4	2.5	3.3	...

Source : Statistical Bulletin of the Control Commission for Germany (British Element).

[1] Incl. investment goods (iron and steel, foundry products, vehicles, building materials, etc.) and producer goods for general requirements (coal, oil, gas, electricity and chemicals).

[2] Incl. some staple fibre.